

First Aid in the Summer

A scenic view of a beach with a wooden fence in the foreground, leading to a sandy beach and the ocean under a blue sky with scattered clouds.

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Today's Topics

- Sprains and strains
- Food poisoning
- Poison ivy, oak and sumac
- Marine bites and stings
- Heat-related illness

Sprains



- Joint injury
- Stretching or tearing of ligaments
- Joint overextended or forced beyond normal range of movement
- Can range from mild to severe
- Ankles, knees, wrists, fingers most sprained

First Aid for Sprains

- Rest
- Ice
- Elevate
- Immobilize with a splint if the victim is to be moved
- Seek medical attention



Strains

- Tearing of a muscle or tendon (connects muscle to bone)
- Tear usually partial
- Muscle stretched too far by overexerting the body area
- Look for pain, swelling, sometimes inability to use muscle
- Extremity strains common in sports

First Aid for Strains



- Rest
- Ice
- Elevate
- Follow-up light exercise
- With a very serious muscle or tendon tear, surgical repair may be required

Food Poisoning



- Occurs after eating food contaminated with bacteria or their toxins
- 76 million/year become sick
- 5000 die/year
- Improper cooking or leaving food out for > 2 hours
- Symptoms soon after eating or within 1 day

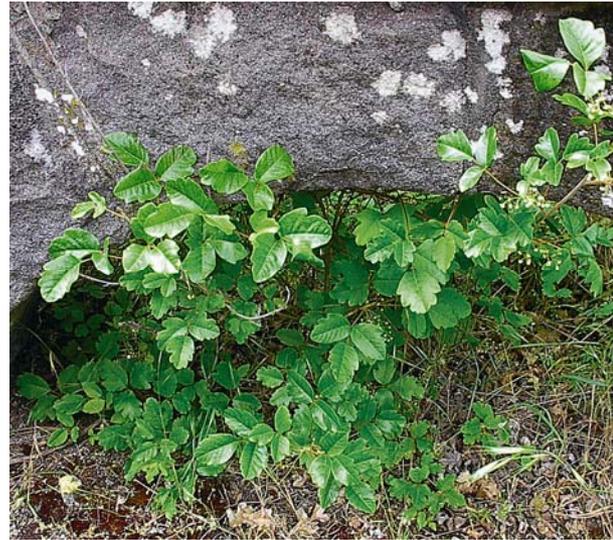
Food Poisoning Signs and Symptoms

- Nausea
- Vomiting
- Abdominal pain
- Diarrhea

First Aid for Food Poisoning

- Have the victim rest lying down
- Give lots of clear liquids
- Talk to healthcare provider to see if treatment is needed
- Seek urgent medical care if:
 - Signs of shock
 - Signs of severe dehydration
 - Confusion or difficulty reasoning

Poison Ivy, Oak, Sumac



- Contact causes allergic skin reaction
- Resin in the leaves causes the reaction
- Resin can transfer from clothing, shoes
- Rash within hours or up to 2 days of exposure

Signs and Symptoms of Poison Ivy, Oak, Sumac



- Redness and itching
- Rash, blisters (may weep)
- Possible headache and fever

First Aid for Poison Ivy, Oak, Sumac

- Wash area thoroughly with soap and water ASAP after contact
- Treat itching
 - Colloid oatmeal baths
 - Baking soda & water paste
 - Calamine lotion
 - Topical hydrocortisone cream
 - Oral antihistamine (e.g., Benadryl)

First Aid for Poison Ivy, Oak, Sumac, Cont'd

- Seek medical attention for severe reactions or swelling on the face or genitals
- Wash clothing and shoes (and pets) that contacted the plants to prevent further spread
- Do not burn plants—smoke also spreads resin

Marine Bites

- Biting marine animals include sharks, barracudas, and eels
- Marine bites are rare
- First aid—same as for bleeding and wound care
 - Stop bleeding
 - Care for shock
 - Summon help



Marine Stings



- Stinging marine life include:
 - Jellyfish
 - Portuguese man-of-war
 - Corals
 - Spiny sea urchins
 - Anemones
 - Stingrays

Marine Stings, Continued



- Most stings are painful but not dangerous
- A very rare few may experience allergic reaction or severe toxic reaction
- Rarely life-threatening

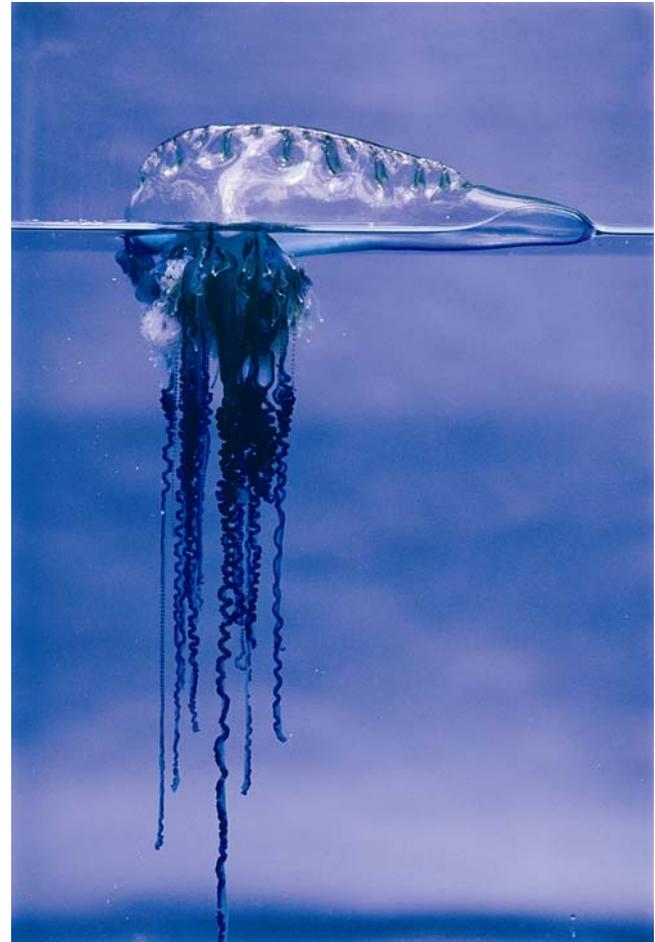
Signs and Symptoms of Marine Stings



- Immediate, intense pain
- Burning sensation
- Red welts often in a row

Signs and Symptoms, Continued

- In severe toxic or allergic reactions:
 - Difficulty breathing
 - Swelling of throat
 - Signs of shock
 - Muscle paralysis
 - Seizures
 - Unresponsiveness
- Call 9-1-1 or other emergency number



First Aid for Jellyfish or Portuguese Man-of-war Stings

- Scrape off any tentacles w/ rigid plastic
- Apply a compress soaked in vinegar or apply baking soda/water paste
- A warm or hot water pack for pain
- Give standard wound care
- Seek medical attention if:
 - Serious symptoms appear
 - Victim is a child
 - Victim has had allergic reaction before
 - Significant stings on face or eyes

First Aid for Urchin or Stingray Puncture Wounds



- Immerse injured part in how water for 30 minutes
- Wash wound with soap and water
- Apply a dressing
- Seek medical attention

Heat-related Emergencies

- Heat cramps
- Heat exhaustion
- Heat stroke

Heat Cramps

- Caused by activity in hot environment
- More common in lower legs or abdominal muscles
- Body's sodium levels lowered
- May accompany heat exhaustion and heatstroke

First Aid for Heat Cramps

1. Have person stop activity and sit quietly in cool place
2. Give sports drink or water
3. Have person avoid strenuous activity for a few hours

Heat Exhaustion

- Heavy sweating may lead to dehydration and depletion of salt and electrolytes
- Unrelieved, may lead to heatstroke

First Aid for Heat Exhaustion

1. Move victim from heat to rest in cool place. Loosen or remove clothing.
2. Give sports drink or water
3. Raise legs 8-12 inches
4. Cool victim



Heatstroke

- Life-threatening emergency
- More common during hot, summer periods
- May develop slowly over days or more rapidly with strenuous activity
- Victim may be dehydrated and not sweating or may be sweating heavily
- Causes body temperatures $\geq 104^{\circ}$ F

Temperature (F) versus Relative Humidity (%)

F	90%	80%	70%	60%	50%	40%
80	85	84	82	81	80	79
85	101	96	92	90	86	84
90	121	113	105	99	94	90
95		133	122	113	105	98
100			142	129	118	109
105				146	133	121
110						135

HI	Possible Heat Disorder
80F–90F	Fatigue possible with prolonged exposure and physical activity.
90F–105F	Sunstroke, heat cramps, and heat exhaustion possible.
105F–130F	Sunstroke, heat cramps, and heat exhaustion likely, and heatstroke possible.
130F or greater	Heatstroke highly likely with continued exposure.

Heatstroke vs. Heat Exhaustion

Heatstroke

- Victim's skin is flushed and feels hot to touch
- Victim becomes confused and irrational and may become unresponsive or have convulsions

Heat Exhaustion

- Skin is pale, or ashen, and clammy
- Victim dizzy or tired or may be irritable and have a headache

First Aid for Heatstroke

1. Call 9-1-1 or local emergency number.
2. Move victim to cool place
3. Remove outer clothing
4. Cool victim quickly



Questions?

